

ABSTRACT

A method for comparing the variable reactivity of multiple, differentially mutated copies of 16S subsequences found in a number of ribosomal RNA operons of a single bacterial cell is described. The application of this method for distinguishing between closely related organisms, such as the genera *Escherichia* and *Shigella*, and between species of *Shigella* including *S. boydii*, *S. dysenteriae*, *S. flexneri*, and *S. sonnei* using nucleic acid probes is also presented.